

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009073**Date Inspected:** 20-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Fabrication**Summary of Items Observed:**

CWI Inspector: Mr. Peng Guo

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

Tower Milling Station

ZPMC issued "Inspection Notification Sheet" number 4249 informing QA that ZPMC has completed visual inspections (VT), magnetic particle (MT) inspections and or ultrasonic (UT) inspections of the following West Tower Lift 1 welds: Item 1: Diaphragm to C/D corner diagonal plates, VT & MT. Item 2: Skin C/D corner diagonal plate Splice welds, VT & UT. Item 3: Diagonal plates to skin C and skin D, VT & MT. Dayshift Caltrans Inspectors' performed inspections of many of these welds and they observed the welds between elevations 23 meters and 46.7 meters required removal of light rust. This QA Inspector performed inspections of the following welds:

Item 1: Weld WSD1-A115J/J-054 VT: This QA Inspector observed porosity, and or arc strikes at approximately 38, 47.6 and 55 meter elevations. ZPMC CWI Mr. Peng Guo agreed that the weld is not visually acceptable and he will inform dayshift personnel to rework this weld. This QA Inspector did not perform magnetic particle inspections of this weld due to the visual rejections.

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Item 1: Weld WSD1-A115J/J-056 VT: This QA Inspector observed visual linear indications where adjacent weld stringer passes were not smoothly transitioned at approximately 55 meter elevation. ZPMC CWI Mr. Peng Guo agreed that the weld is not visually acceptable and he will inform dayshift personnel to rework this weld. This QA Inspector did not perform magnetic particle inspections of this weld due to the visual rejections.

Item 2: Weld WSD1-A115J/J-023 VT & UT: This QA Inspector performed ultrasonic inspections and observed a class "A" indication near the end of the weld. For additional information on this inspection see the TL6027 Ultrasonic Test Report.

Item 2: Weld WSD1-A115J/J-017, WSD1-A115J/J-019, WSD1-A115J/J -021, WSD1-A115J/J -024, WSD1-A115J/J-041, WSD1-A115J/J -042, WSD1-A115J/J -044 and WSD1-A115J/J -046, VT & UT: This QA Inspector performed visual and ultrasonic inspections and items observed appear to comply with project specifications. For additional information on this inspection see the TL6027 Ultrasonic Test Report.

Item 3: Weld WSD1-A115D/J-249, WSD1-A115D/J-250, WSD1-A115E/J-126, WSD1-A115E/J-127, WSD1-A115E/J-241, WSD1-A115E/J-242, VT & MT: This QA Inspector observed items appear to comply with project specifications. For additional information on this inspection see the TL6028 Magnetic Particle Test Report.

Item 3: Weld WSD1-A115F/J-243, WSD1-A115F/J-242, WSD1-A115G/J-120, WSD1-A115G/J-121, WSD1-A115G/J-236, WSD1-A115G/J-237, WSD1-A115H/J-118, WSD1-A115H/J-119, VT & MT: This QA Inspector observed each of these welds is visually rejectable due to arc strikes, spatter or sharp contours at or near the terminations of the welds and ZPMC CWI Mr. Peng Guo agreed that the welds are not visually acceptable and that he will inform dayshift personnel to rework these welds.

This QA Inspector generated an Incident Report documenting the unacceptable welds listed above. See the photographs below for additional information.

Summary of Conversations:

See above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod phone: 134-8257-0045 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
